

## SEQUENCE LISTING

&lt;110&gt; Maxygen Holdings

&lt;120&gt; Full-length Interferon Gamma Polypeptide Variants

&lt;130&gt; 0253wo410

&lt;140&gt;

&lt;141&gt;

&lt;160&gt; 12

&lt;170&gt; PatentIn Ver. 2.1

&lt;210&gt; 1

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1

Gln	Asp	Pro	Tyr	Val	Lys	Glu	Ala	Glu	Asn	Leu	Lys	Lys	Tyr	Phe	Asn
1				5					10					15	

Ala	Gly	His	Ser	Asp	Val	Ala	Asp	Asn	Gly	Thr	Leu	Phe	Leu	Gly	Ile
			20					25					30		

Leu	Lys	Asn	Trp	Lys	Glu	Glu	Ser	Asp	Arg	Lys	Ile	Met	Gln	Ser	Gln
		35					40					45			

Ile	Val	Ser	Phe	Tyr	Phe	Lys	Leu	Phe	Lys	Asn	Phe	Lys	Asp	Asp	Gln
	50					55				60					

Ser	Ile	Gln	Lys	Ser	Val	Glu	Thr	Ile	Lys	Glu	Asp	Met	Asn	Val	Lys
65				70					75					80	

Phe	Phe	Asn	Ser	Asn	Lys	Lys	Lys	Arg	Asp	Asp	Phe	Glu	Lys	Leu	Thr
			85					90						95	

Asn	Tyr	Ser	Val	Thr	Asp	Leu	Asn	Val	Gln	Arg	Lys	Ala	Ile	His	Glu
		100						105					110		

Leu	Ile	Gln	Val	Met	Ala	Glu	Leu	Ser	Pro	Ala	Ala	Lys	Thr	Gly	Lys
		115					120					125			

Arg	Lys	Arg	Ser	Gln	Met	Leu	Phe	Arg	Gly	Arg	Arg	Ala	Ser	Gln	
	130					135					140				

&lt;210&gt; 2

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2

Met	Lys	Tyr	Thr	Ser	Tyr	Ile	Leu	Ala	Phe	Gln	Leu	Cys	Ile	Val	Leu
1				5					10					15	

Gly Ser Leu Gly Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu  
                   20                                  25                                  30  
 Asn Leu Lys Lys Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn  
                   35                                  40                                  45  
 Gly Thr Leu Phe Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp  
                   50                                  55                                  60  
 Arg Lys Ile Met Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe  
                   65                                  70                                  75                                  80  
 Lys Asn Phe Lys Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile  
                                   85                                  90                                  95  
 Lys Glu Asp Met Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg  
                                   100                                  105                                  110  
 Asp Asp Phe Glu Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val  
                   115                                  120                                  125  
 Gln Arg Lys Ala Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser  
                   130                                  135                                  140  
 Pro Ala Ala Lys Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Arg  
                   145                                  150                                  155                                  160  
 Gly Arg Arg Ala Ser Gln  
                                   165

&lt;210&gt; 3

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Actimmune

&lt;400&gt; 3

Met Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys Tyr Phe  
           1                                  5                                  10                                  15  
 Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe Leu Gly  
                   20                                  25                                  30  
 Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met Gln Ser  
                   35                                  40                                  45  
 Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Lys Asp Asp  
                   50                                  55                                  60  
 Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met Asn Val  
                   65                                  70                                  75                                  80  
 Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu Lys Leu  
                                   85                                  90                                  95

Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala Ile His  
 100 105 110

Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys Thr Gly  
 115 120 125

Lys Arg Lys Arg Ser Gln Met Leu Phe Arg Gly Arg  
 130 135 140

&lt;210&gt; 4

&lt;211&gt; 498

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Expression  
 cassette optimised for expression of interferon  
 gamma in CHO cells

&lt;400&gt; 4

atgaagtaca caagctatat cctggccttt cagctgtgca tcgtgctggg ctccctgggc 60  
 tgctattgcc aggaccctta cgtgaaggag gccgagaacc tgaagaagta ctttaacgcc 120  
 ggccacagcg atgtggccga caatggcaca ctgtttctgg gcatcctgaa gaattggaag 180  
 gaggagagcg atcggaagat catgcagtcc cagatcgtgt ccttctatct caagctgttt 240  
 aagaatttca aggacgatca gtccatccag aagtccgtgg agaccatcaa ggaggacatg 300  
 aacgtgaagt ttttcaatag caataagaag aagagagacg atttcgagaa gctgaccaat 360  
 tactccgtga cagacctgaa cgtgcagaga aaggccatcc acgagctgat ccaggtgatg 420  
 gccgagctgt ccccgccgc caagaccggc aagagaaaga gaagccagat gctgttcaga 480  
 ggcagacggg ccagccag 498

&lt;210&gt; 5

&lt;211&gt; 19

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Primer

&lt;400&gt; 5

gatggctggc aactagaag 19

&lt;210&gt; 6

&lt;211&gt; 19

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Primer

&lt;400&gt; 6

tgtacggtgg gaggtctat 19

<210> 7  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 7  
gttcaggctct gtcacgctgt aattggtcag ctt 33

<210> 8  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 8  
aagctgacca attacaccgt gacagacctg aac 33

<210> 9  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 9  
catgatcttc cgatcggctct cgttcttcca att 33

<210> 10  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 10  
aattggaaga acgagaccga tcggaagatc atg 33

<210> 11  
<211> 40  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 11  
ccgtcagatc ctaggctagc ttattgcggt agtttatcac 40

<210> 12

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 12

gagctcggta ccaagctttt aagagctgta at 32